

AC4442

Cambridgeshire County Council.

EDUCATION COMMITTEE.

**TWENTY-SIXTH
ANNUAL REPORT**

OF THE

SCHOOL MEDICAL OFFICER

FOR THE YEAR ENDING 31st DECEMBER, 1934.

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Introduction.

At the end of 1934 there were 124 Public Elementary Schools under the control of the County Education Committee (52 Provided and 72 Non-Provided), comprising 125 separate departments. The number of children on the school registers at the end of the year was 8,980, the average number in attendance being 7,976.

Staff.

Servieses in connection with school medical work were rendered by the following :—

*FRANK ROBINSON, M.D., D.P.H., *School Medical Officer and Medical Officer of Health.*

*JESSIE H. GELLATLY, M.D., D.P.H., *Assistant do.*

*W. PATON PHILIP, M.C., M.B., D.P.H., D.M.R.E., *Tuberculosis Officer.*

*J. C. G. EVERED, L.D.S. (Edin.), *School Dentist.*

W. H. HARVEY, M.D., *Bacteriologist.*

J. C. W. GRAHAM, M.D., *Ophthalmic Surgeon.*

E. H. EZARD, M.D., D.Sc., *Ophthalmic Referee.*

MISS A. GRAHAM, *Superintendent of County Nursing Association.*

*G. G. GALPIN, *Chief Clerk and Enquiry Officer under the Mental Deficiency Acts.*

* Whole-time Officers of the County Council.

Co-Ordination.

As set out in previous reports the elementary education and Maternity and Child Welfare areas coincide and comprise the whole Administrative County outside the autonomous Borough of Cambridge. It consists entirely of rural parishes. Both services are administered from the County Public Health Department and the same Nurses are employed for both purposes. The reports on the pre-school child are a basis for the remedy of defects through the Maternity and Child Welfare scheme before entry to school life, and the records are systematically transferred to the schools. The pre-school remedial measures include orthopaedic treatment and the remedy of refractive errors. Co-ordination is also secured in dealing with the mentally defective child as the School Medical Officer is also the Council's medical adviser under the Mental Deficiency Acts, and as he is also Chief Administrative Tuberculosis Officer the co-operation secured through the Dispensary organisation is intimate and valuable.

Hygienic Condition of Premises.

Much consideration was, as usual, given by the Buildings Sub-Committee to problems of structural alterations and improvements, the most important work actually undertaken being, perhaps, that at Over Council School, where new offices were constructed to replace the existing unsatisfactory structures, new windows were provided in the school, improvements were effected to the playground, and the old dwelling house was converted into staff and medical inspection rooms. The proposed new School at Fen Ditton was deferred for reasons arising out of future possibilities in the area.

The problem of the open-air type of school construction came up again at Papworth Everard, where the great majority of the children belong to the families of adults who, after treatment for tuberculosis, have become permanent residents in the Village Settlement. It was resolved that a school of this type be erected in substitution for the existing building, the cost to be shared between the Education Authority and the Settlement, and the financial conditions were under discussion at the end of the year.

Other undertakings included the provision of a sectional timber block for wood-work instruction at Burwell Senior Council School, and temporary arrangements for cookery instruction at Bottisham Council School. Arrangements for practical instruction at Melbourn Council School are still under consideration.

Electric lighting, which will result in a purer atmosphere and lessened eye-strain, is gradually being introduced into the schools. During the year it was approved for the Burwell Senior and Six Mile Bottom Council Schools, while at the Infant School at Impington electric panels were introduced to supplement the open fires. These may in themselves not appear very important but they indicate that modern developments which have a decided health value are being introduced by the Committee into their school buildings.

A useful decision was that to adopt the application of a dust-allaying preparation in all the schools in the County, and from this an improved standard of cleanliness may be looked for in the future.

In last year's report stress was laid on the school garden from the hygiene view point, as assisting school dinner schemes, but especially as tending to lead to the greater use of cottage gardens for vegetable production for the dietary of children. It was then noted that some 43 schools with senior children in attendance had gardens and that some 13 or 14 had been specially reported upon by the Supervisor. The question of securing additional ground at some dozen schools was under consideration, but the results appear to be disappointing as developments were limited to the provision of new plots at Isleham and Gamlingay with extension at Over Council School.

The County Architect, Mr. Urwin, has kindly furnished the following note on the proposed construction of the new Village College, including elementary school premises, designed for the Bottisham group of schools.

"Every attention has been given in the proposed scheme to provide model open air conditions for all Class Rooms and other teaching rooms. The whole of these rooms will have windows along the south east side in order to obtain the morning sun and the Class Rooms will be fitted with fully glazed doors in order that this sunny side can be thrown entirely open."

Provision will be made in the Cloak Rooms for drying wet clothing and in addition to the installation of washing fountains instead of the old type of independent lavatory basins, shower baths will be provided.

A clinic and welfare centre having waiting room, consulting room and dressing room will be provided in connection with the new Infant and Junior Department, which it is hoped will be a useful acquisition to the district."

Medical Inspection.

The arrangements for inspection of children in the three prescribed age-groups and for annual re-inspection continue unaltered, the actual examination being carried out by Dr. Gellatly, the Assistant School Medical Officer, who is also approved by the Board for the certification of exceptional children (blind and deaf, etc.)

The numbers examined will be found in Table I appended to this report, the principal totals being :—

Routine examinations .. .	2,965
Specially presented .. .	390
Re-examinations .. .	5,062

The declining birth-rate is reflected in the smaller number of entrants (866) examined in the routine age-groups compared with the children examined at higher ages in the second and third age-groups (995 and 955 respectively). Although a proportion of the re-examinations are for defects of importance a large proportion are for the continued observation of minor degrees of defect, and are of preventive value.

Findings of Medical Inspection.—The defects disclosed are set out in the Board's Table II A. appended to this report. The following items call for special comment.

Malnutrition.—Children recorded as of subnormal general physique, including minor degrees of defect, numbered 154 against 256 in 1933. The proportion in the routine age groups was 5.2 against 7.5 and 9.3 in 1933 and 1932 respectively. The comparable average annual figure for the immediately preceding five years ending 1933 was 9.7 per cent. Although there may be some fluctuation in the proportions recorded, the general trend of the figures undoubtedly indicates a substantial improvement in physique from the conditions observed in 1910 the first complete year of the medical inspection scheme, when 23.1 per cent of the children examined in routine age-groups were recorded to be below normal in this respect. Continued improvement may certainly be anticipated from the voluntary scheme of milk supply to a large mass of school children which was launched towards the end of 1934, supplemented by the improvement in physical instruction which will result from the recent appointment of Organisers of Physical Training in the Public Elementary Schools of the County.

Uncleanliness.—Children noted as having nitty, or, less seldom, actively verminous heads numbered 69 (routine 56, special 13), of whom 28 required immediate remedy and 41 were slighter cases noted for observation. The percentages, based on routine examinations only, were :—

	1930.	1931.	1932.	1933.	1934.
Total found unclean (all degrees) .. .	2.8	2.4	2.8	2.3	1.9
Requiring treatment .. .	1.1	1.1	0.9	1.1	1.4

During the past five years, therefore, the total number of children

found to have uncleanly heads has averaged 2.3 per cent, and such change as has occurred has been in the direction of improvement. The 132 children with uncleanly bodies as noted at routine inspections were in the proportion of 4.4 per cent, compared with 7.2 in 1933.

Visual Defects.—The figures for refractive errors, including cases of squint, for the past five years are as follows :—

	1930.	1931.	1932.	1933.	1934.
<i>Referred for treatment :</i>					
Routine	54	59	67	64	84
Speciaily presented	24	24	19	20	27
<i>For observation :</i>					
Routine	156	152	176	184	165
Speciaily presented	17	7	12	23	36

Early treatment was thus advised in 2.8 per cent of the children in the routine age groups, and 5.6 per cent were kept under observation. The cases of external eye disease call for no special comment, beyond the fact that they include some cases of conjunctivitis, of which there were several outbreaks in Elementary Schools during the year, which are not known to have resulted in any permanent injury to sight.

Nose and Throat Defects.—Omitting conditions other than those definitely diagnosed as chronic tonsillitis, adenoids, or both, the number of children recorded in this group was 139 against 147 in the previous year, a percentage, based on routine inspections, of 3.4 against 4.5 in 1933 and 4.8 in 1932. As noted in last year's report, the great majority of these were cases of chronic tonsillitis only, which were not referred for treatment as they were not causing any obvious disability. Apart from "other conditions" not definitely diagnosed but mainly mouth-breathers, not more than 11 children (routine and specially presented) were recorded as in immediate need of active interference, but as the number known eventually to have received treatment considerably exceeded this figure many of them must originally have been noted among the mouth breathers.

Dental Defects.—Information on this subject appears in the School Dentist's report appended, in the section on Remedial Measures, and in Table IV, Group V.

Orthopaedic and Postural Defects.—The deformities recorded during inspections numbered 13, of which 1 was definitely attributed to rickets. In this rural County, though many slight cases of bow-legs or other rickety deformities of the long bones are noted below school age, every effort is made to ensure that preventive treatment is sought at the orthopaedic clinics and few serious cases of rickety deformity arrive at school. Few cases of infantile paralysis are met with as a cause of deformity, and the number of children sent to orthopaedic institutions for tubercular disease of bones and joints did not exceed two in 1934.

It will be seen that 55 children of school age are rerecorded in the treatment tables, the figures being mainly obtained from the records of the orthopaedic clinics.

Heart Disease and Rheumatism.—Of the 6 children noted at inspections, in no case was the heart lesion regarded as organic. The one child educated in a heart home was admitted during the previous year.

Tuberculosis.—Two cases only were noted during inspections, and both were non-pulmonary. The gratifying decline noted in previous reports is thus substantiated, and is well shown by the absence of a waiting list of children approved for admission to sanatoria and by the following figures which indicate the average number of tubercular children noted annually during the two successive five-yearly periods specified.

	Lungs.	Other Organs.	Total.
1925-1929	..	12.4	9.6
1930-1934	..	0.4	2.6

Diseases of the Skin.—The following figures show the incidence of the principal contagious skin diseases :—

	Discovered at Routine Inspections.	Notified by Teachers or Nurses.	Total.
Ringworm of the scalp	1	—	1
Ringworm of the body	2	25	27
Seasies	.. ..	2 5	7
Impetigo	.. ..	4 130	134

It is now rare for children in more than a few families to be infected with the really troublesome form of ringworm, that which invades the scalp and causes prolonged loss of school attendance. Ringworm of other skin areas is more frequently met with owing, no doubt, to association of country children with cattle. Impetigo continues to be the one troublesome skin infection of school life, but for two years in succession the number notified (134 in 1934) was considerably below the average (263) for the previous five years.

Following-up.—The established arrangements for observation and for securing treatment, through medical reinspection in the schools or through home visits paid by the School Nurses, were continued through the year, and the scope of the work undertaken by the Nurses will be grasped from the following figures.

1. Visits to Schools :—

(a) Routine Medical Inspection..	..	..	143
(b) Special verminous inspections	..	..	13
(e) Other purposes .. ..	..	..	1365
			1521

2. *Visits to Homes of Scholars:*

(a) Following-up to secure treatment	6531
(b) Special enquiries into infections and contagious diseases	1378
(c) Special enquiries into refusals of dental treatment	2212
(d) Other purposes	579
	10700

Arrangements for Treatment.

The scheme of medical treatment, which continued unaltered during the year, mainly comprises (a) payment to Addenbrooke's Hospital, Cambridge, for various forms of treatment, and (b) to the Red Cross Society for Orthopaedic Centre work, (c) travelling dental and ophthalmic clinics, (d) assistance in the provision of spectacles and surgical appliances and in travelling expenses for treatment, and (e) the provision of milk and malt and cod liver oil for illnourished children.

Malnutrition.—The names of children of this type are placed on the Remedial Lists in order that their home environment may be supervised by the School Nurses, it being recognised that this condition results not only from insufficient or unsuitable or illcooked food, but also from the mode of life. Meetings of Teachers and of mothers have been addressed by the medical staff as opportunity has arisen. Malt and cod liver oil continued to be provided and will be less needed in the future owing to the inauguration of the scheme for the free supply by the Committee of milk to children of subnormal physical condition.

Ill-nourished children admitted to residential open-air schools was 5, making with 6 in residence at the beginning of the year a total of 155 who have thus been maintained by the Local Authority in such institutions up to the end of 1934.

Uncleanliness.—There was again no departure from the customary method of supervision by systematic medical re-inspection of all recorded uncleanly children, however slight the degree, supervision of all uncleanly children in their homes by the School Nurses, complete cleanliness surveys of individual schools in special circumstances, and exclusion from school of all aggravated cases until cleansed. Exclusion proved necessary for 22 children against 36 in the previous year and all were cleansed without resort to the Courts.

During special complete surveys by the School Nurses 60 out of 590 children examined showed some degree of uncleanliness and the customary procedure was followed to secure cleansing. The figures in Table IV, Group V, relate to these special inspections only, and the note that no children were cleansed under arrangements made by the Local Education Authority must be read as meaning only that

there are no special arrangements for cleansing stations under the Regulations governing this subject. As a matter of fact very active and direct assistance is given by the nursing staff where the mother herself fails to cleanse.

Minor Ailments and Diseases of the Skin.—There being no urban centres in the Elementary Education area there are no minor ailment clinics, the necessary attention for such conditions, including impetigo and other skin diseases, being supervised by the School Nurses in the homes of the children. This is supplemented by advisory leaflets to the parents. In a minority of cases the children are referred to Addenbrooke's Hospital for treatment, including cases of ringworm of the scalp in need of X-rays treatment.

With the development of the grouped-school system the establishment of clinic arrangements at the Senior Schools may become a practical proposition and may render possible the continued attendance at school of children whose exclusion is now considered necessary.

Visual Defects.—During the year, 258 children were dealt with (244 in 1933) of whom 213 received attention under the Committee's scheme and 45 by private practitioners or otherwise unofficially. Of those who came under the Committee's scheme, 159 (161 in 1933) were dealt with by the Assistant School Medical Officer through her travelling ophthalmic clinic scheme and 54 by Dr. Graham, at Cambridge. Spectacles were prescribed for and received by 249 children, of whom 204 are recorded as having received them with the aid of the Committee. In addition to the children thus aided were 16 below school age suffering from squint who were dealt with by the Assistant School Medical Officer with a view to remedy before or during early school life.

Nose and Throat Defects.—Of 80 children treated for these defects, 25 are known to have received operative treatment against 35 in the previous year, but the number (12) aided to do so by the Local Authority remained at the same level as in the past two years. The Board of Education have for the past two years required a more detailed classification of cases which had received operative treatment and this is done as far as the available information goes, but it would be inadvisable to place too much reliance on the distribution of the figures in the columns prescribed by the Board. This comment applies especially to those recorded as having received operative treatment through the agency of the private practitioner, as there is seldom definite information as to the precise condition found on treatment.

Dental Treatment.—The scheme of dental treatment which was initiated in 1913 came of age in 1934, during which year 7924 school children were inspected by the School Dentist and 2467 received treatment. Under this scheme the Dentist's apparatus is conveyed by him to the schools in a motor van, the work of inspection and treatment being undertaken by him on the school premises in the

great majority of instances. Children under five years attending schools exceeding 60 children on register have not so far been dealt with, but with this exception the scheme provides for all elementary scholars in the area. In special circumstances, children are treated by the School Dentist on Saturday mornings at the County Dispensary.

As the accommodation available at a fair number of schools is decidedly inconvenient for treatment purposes, the Committee have considered the provision of a dental van fitted as a travelling dental surgery, a method which has met with a considerable degree of success elsewhere. It is, however, a debatable question whether as a matter of policy the better line of future development would be to bring full facilities into every corner of the County by this means, whether it is welcomed or not, or to concentrate particularly on the more compact centres of population where there is a greater likelihood of success and a greater amount of work can be accomplished by the limited professional staff.

Following on a visit of inspection paid by an Inspector of the Board of Education the report received commented on the amount of time spent on dental inspections, and raised the further question of the appointment of a permanent dental attendant. On the former point it was considered that an undue proportion of time was spent on dental inspections, and it was suggested that, as in other areas, in the smaller schools at any rate the consent of the parents to treatment, if found necessary, should be obtained before inspection, so that both inspection and treatment could be completed in one session instead of two as in the past. The necessary authorisation was given by the Committee, who also expressed their willingness to appoint a permanent dental attendant, who need not be a trained hospital nurse, when opportunity occurs.

On consideration of the School Dentist's report (appended) the following points may be emphasised.

1. The total number of children (7755) examined in the public elementary schools was 1117 fewer than in the previous year, partly owing to the smaller number of children on the registers. On the other hand, the number of inspections in the Secondary Schools increased from 157 to 643.

The following observations apply to schools where both inspection and treatment were completed during the year.

2. There was but little change in the proportion of children found to require treatment, viz. 50.7 per cent of those examined, against 50.4 per cent in the previous year.

3. Of the 3890 children noted as needing treatment practically the same proportion actually received it as in the previous year, viz. 64.1 against 63.9 per cent. Conversely the percentage of refusals was 35.9 against 36.1 in 1933, and it has remained at about this level for some years past. Whether the contemplated scheme of inspection and treatment at the same session in the smaller schools will modify this proportion remains to be seen; it is claimed in at any rate one large County that it has reduced it.

Up to the present, apart from the help given by the Teachers, systematic attempts have been made to lower the refusal rate by the

efforts of the School Nurses and by educational work through other channels. During the year the School Nurses paid 2212 visits to the parents in their homes to endeavour to secure the withdrawal of objections, often a discouraging task. It is obvious from the reports of the Nurses that there is still a great amount of popular ignorance and prejudice to be overcome, and it is hoped to combat this by appropriate propaganda. With this object, advantage was again taken during the year of the help afforded by the Dental Board of the United Kingdom, one of whose lecturers was again rendered available in the villages for a fortnight's campaign in December. During this period it was practicable for instructional addresses, illustrated by suitable exhibits, to be given at some 30 or more village schools, as well as at certain Secondary Schools in Cambridge.

4. Although the number of fillings (1872) was smaller than in the previous year, when estimated in proportion to the number of children actually treated it showed in reality an increase, though a slight one.

Reference to dental work in the Secondary Schools will be found in the statement regarding the medical service in these schools at the end of this report.

Orthopaedic Treatment.—Through the Maternity and Child Welfare Committee and the Education Committee, the County Council assists in the provision of orthopaedic treatment for children from infancy till school-leaving age in the following ways:—

(1) Through a substantial annual grant to the Cambridgeshire Branch of the British Red Cross Society in recognition of their scheme for the care of crippled. This is expended in the general costs of the clinics, and the salary and travelling expenses of the Orthopaedic Sister.

(2) By assistance with the expenses incurred in travelling to the Orthopaedic Clinic at Addenbrooke's Hospital, and to the Red Cross Society's three subsidiary centres accessible to Cambridgeshire patients.

(3) By assisting in the provision of surgical appliances. Five school children were aided in this way on seven occasions in 1934.

(4) By payment to Addenbrooke's Hospital of the cost of inpatient or outpatient treatment where the family are not contributors under the Hospital scheme. Payment has similarly been made for inpatient treatment of school children in the National Orthopaedic Hospital in special cases.

(5) By payment for school children under training in a special cripple school. One child was being maintained in 1934 at the Heritage Craft Schools, Chailey, Sussex.

(6) Through the Public Health Committee's scheme of treatment for Tuberculosis, by maintaining children suffering from tuberculosis of the bones and joints at appropriate institutions for treatment. Including 2 new admissions, 5 children were maintained during 1934 and 4 remained under treatment at the end of the year.

During 1934, in the whole area covered by the Clinic at Addenbrooke's Hospital and those managed by the Red Cross Society, 685 patients (208 new) were dealt with, 1935 clinic visits and 237 home visits being paid. The following figures relate to patients exclusively from the Cambridgeshire rural area, which is coincident with the County Maternity and Child Welfare and Elementary Education areas.

Age.	All Cases.	New Cases.	Clinic Visits.	Home Visits.
Under 5	59	31	218	77
Over 5	54	18	244	40
Adults	39	19	143	16
Total	152	68	605	133

From these figures it is evident that three quarters of the Cambridgeshire orthopaedic patients in attendance at the Centres are children of school age or younger, leading to the conclusion that a considerable proportion of orthopaedic defects are receiving appropriate attention early in life, while still remediable, which, of course, is as it should be. The most important period is below school age, and a careful eye is kept at headquarters on the visitation reports of the Nurses relating to very young children to ensure that where such defects are noted every effort is made to influence the mothers to seek skilled advice, all reasonable assistance being offered through the Maternity and Child Welfare Scheme. Similar aid is also given through the Education Committee to children of school age.

It is satisfactory to note that though the total number of children dealt with at the Clinics was less than in the previous year, there was a substantial increase in the number of children attending for the first time. Moreover, twice as many visits per head were paid by the patients to the Clinics, and the visits paid by the staff to the homes of the children for special purposes increased substantially also.

From what has been said it will be inferred that continuity of care from the earliest years to and through school life is effectively secured by the records from both Maternity and Child Welfare and School Medical Service sources passing through the same administrative centre, while the same Nurses supervise the child at all stages. Except from the financial aspect the scheme is in fact one, with the addition of instruction, vocational or otherwise, during the period of normal school life.

Tuberculosis.—The fact that illnourished school children belonging to tubercular families may receive milk, or malt and cod liver oil in school, and are among those selected for admission to residential open-air schools, has its preventive value. Now that a number of open-air shelters belonging to the Public Health Committee are released from their ordinary use because of the smaller number of tubercular patients coming to notice, some of these might profitably be placed at the disposal of children not yet infected but in a state of poor resistance to danger threatening them in their ordinary home surroundings.

In addition to 7 tubercular children remaining in institutions from the previous year there were 5 admissions, making a total of 12 under treatment, of whom 8 were discharged and 4 remained under treatment on January 1st, 1935.

Admitted during 1934.

	<i>Boys.</i>		<i>Girls.</i>	<i>Total.</i>
Lungs and Thoracic Glands	—		1	1
Bronchial Glands ..	.. 1		—	1
Cervical Glands ..	.. —		1	1
Hip and Spine ..	.. 2		—	2
Total	.. ..	3	2	5

Remaining on 1st January, 1935.

		<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Spine ..	..	.. 1	1	2
Hip Joint ..	..	.. 2	—	2
Total	.. ..	3	1	4

Altogether, during the past seventeen years, 386 children from the County Elementary School area have received sanatorium treatment (pulmonary and thoracic glands 276, bones and joints 48, other organs 62). There was thus an average of 23 children treated annually, the highest number being 33 in 1922, and the lowest being 5 in 1934, the year now under review. As this figure represents the actual needs of the rural child population, uninfluenced by financial considerations, the striking decrease in so short a period as twelve years augurs well for the future and justifies the policy adopted by the Public Health Committee of isolating infective cases, removing early cases from an unfavourable environment and preventing permanent industrial incapacity by the early orthopaedic treatment of children suffering from infection of the bones and joints.

Other Defects Treated.—Of 48 letters of introduction given to Addenbrooke's Hospital, Cambridge, 12 were for tonsils and adenoids, 6 for other diseases of the ear, nose and throat, 4 for diseases of the external eye and visual defects, 6 for dental treatment, 8 for orthopaedic treatment, 3 for diseases of the skin and 9 for other conditions.

Neglect.—The Education Committee subscribe annually to the funds of the N.S.P.C.C., through whose agency enquiries are made and assistance is given towards securing treatment for children in circumstances of neglect or difficulty. During the year, 30 children in 20 families were referred to the Society, in 9 families because of general neglect and uncleanliness and in 11 on account of persistent failure by the parents to provide medical treatment or because of refusal of assistance offered by the Committee.

Infectious Diseases.

Notifications were received from Head Teachers regarding children known or suspected to be suffering from the acute infections or from contagious skin diseases, this procedure being prescribed in the regulations of the Education Committee. The number of schools from which these infections were notified were diphtheria 1, scarlet fever 39, measles 32, whooping cough 28, chickenpox 40, mumps 11, German measles 11, and acute conjunctivitis 3. During the year the School Medical Officer furnished 97 certificates for purposes of calculation of attendance where the Head Teacher had notified its reduction below 60 per cent for a week, owing to infection, the special grounds first being verified in all cases. Special visits to schools were paid by the School Medical Staff on 15 occasions for enquiry and preventive measures, 13 being for scarlet fever, one for diphtheria and one for conjunctivitis. For the detection of diphtheria it was only thought necessary for the small number of 34 swabs to be taken, and none of these showed evidence of infection. Following the customary policy, school closure was only resorted to in exceptional circumstances, the actual number of schools closed being 11, of which 5 were for scarlet fever, 3 for whooping cough, and one each for diphtheria, conjunctivitis, and for influenza with impetigo.

The rural area shared in the unusual prevalence of scarlet fever in England and Wales generally, cases occurring among children attending 39 schools, as previously stated. In a recent report to the Board of Education, Sir George Newman re-states the difficulties of control of scarlet fever in schools, "one of the most difficult problems which School Medical Officers have to solve." Much of this is due to the variability of the symptoms, the possibility of attack without rash and the difficulty of recognition of healthy but never-the-less infectious carriers. During more than one outbreak in the villages during the year it was fairly obvious that these factors were present, contributing to if not fully accounting for the continued prevalence of the infection. In view of these difficulties, Sir George Newman emphasises the necessity for adequate ventilation of class rooms and the satisfactory spacing of the children, while during the summer months open air classes in the playground may help to minimise the transmission of infection from child to child during an outbreak.

During the year diphtheria also was prevalent throughout the country as a whole to an extent much above the average. Cambridgeshire happily escaped this experience, children attending one school only being involved. Such an exceptional record is not likely to be repeated frequently and the question of artificial immunisation of young children against the most dangerous infection of schools will sooner or later require consideration as a practical measure. While this is regarded as the concern of the Public Health Authority rather than of the Education Authority it could be undertaken by these bodies in co-operation and a joint effort could be more readily be undertaken now that a whole time public health service has been established in the whole rural area. The fact that all the Rural Sanitary Authorities now have the same Medical Officer of Health should facilitate the adoption of a uniform policy.

It will be observed that children attending some 60 schools, nearly half the total number in the area, were attacked by measles or whooping cough and no doubt an appreciable proportion of the 1378 home visits paid by the School Nurses in connection with the infectious diseases is accounted for by these diseases. As emphasised frequently in these reports a valuable service is rendered on these occasions by advice to the mothers on the proper care of the young patients, in order to protect them from fatal attacks of pneumonia. The substantial reduction in the recorded mortality from this cause was commented on in last year's report.

Open Air Education.—In last year's report there was given a summary of information furnished by the Head Teachers of 108 schools, from which it appeared that open-air classes were held systematically in 48 schools, occasionally in 23, and not at all in 37. This relates to the ordinary scholastic work and not to physical instruction, and it seems not unlikely that the development of physical instruction under outdoor conditions resulting from the efforts of the newly appointed Organisers may indirectly lead to more habitual outdoor teaching of other subjects usually taught in the classroom. As shade is needed in the hotter months, a further reminder of the little used authorisation by the Education Committee to plant trees in the playgrounds may not be untimely.

The principle of open-air construction of class-rooms is of special interest at Papworth Everard where most of the children belong to families connected with the Village Settlement. It is for this special reason that the Council and the Settlement have jointly agreed on the erection of a new Council School of the open-air type. In the schools which will form an essential feature of the Village Colleges now being developed the open-air principle is being fully followed by the County Architect, Mr. Urwin. At Bottisham, for example, all class-rooms, both junior and senior, will face south-east so as to get the morning sun, and the whole of that side of the class-rooms will be glazed and so constructed that they can be thrown open entirely to the outer air. This obviously constitutes a great advance and should be a powerful factor in improving the general physique of the children.

Physical Training.—This subject, of prime importance to the child not only physically but also as resulting in a mental alertness which must raise the standard of educational fitness, has been the subject of frequent reference in these annual reports. Such references have in the past been necessarily with the object of directing attention to the need for special appointments designed to give the assistance of which the Teachers were in need to enable them to give this form of instruction to the children in a really adequate and effective manner. It is therefore a matter of profound satisfaction to be in a position to record actual accomplished facts, briefly referred to in last year's report.

On consideration of the Annual Report of the School Medical Officer for 1932 the School Attendance Sub-Committee resolved to recommend that consideration be given to the appointment of an

Organiser of Physical Training and that the Borough of Cambridge Education Committee be asked whether they would be prepared to share the services of such an Organiser. This recommendation was adopted in October, 1933, by the Education Committee, who eventually adopted a further recommendation of the Sub Committee, that an arrangement be entered into with the Borough of Cambridge and Isle of Ely Education Authorities for such a joint appointment. Representatives appointed by these Authorities conferred and reported that in their opinion a joint arrangement between the three Authorities for providing instruction in physical training in Elementary Schools would be practicable and economical. They recommended a scheme for consideration in which it was stated that the services of two organisers, a man and a woman, would be necessary, to visit schools and to give demonstrations and advice to members of school staffs. In addition, they would be responsible for taking weekly classes on Saturdays for teachers, for two terms in Cambridge and for one term in the Isle of Ely. These recommendations were approved in due course by the Authorities concerned, and eventually Mr. Harry Payne and Miss Mabel Gibson were appointed as Organising Instructors of Physical Training, dating from September 1st, 1934.

These officers are now carrying out valuable work which is greatly appreciated by all concerned. The appreciation of the Teachers is shown by the fact that 312 Teachers (253 women and 59 men) from the Cambridge County and Borough staffs are attending Physical Training Classes during the Spring of 1935. Towards the end of 1934, the County Education Committee approved the provision of a sum of £500 for essential equipment in the schools.

Provision of Meals.—The importance of a good midday meal for children who have to remain at school all day owing to the distance from their homes is obvious, and is especially recognised by the Committee for children attending a central Senior School under the grouped school system which is now being developed. Assistance is given by the Committee in carrying out certain schemes, and the question of giving further aid in staffing is at present under consideration.

The following notes on some existing schemes are compiled from statements furnished by the Head Teachers of the respective schools.

Bassingbourn Council School.—This scheme, which is the successor of the earliest scheme in the County, dating back from about a quarter of a century, has been in operation from the week ending November 23rd, 1934. Meals are served to a daily average of 35 children at a charge of 3d. per head. If the numbers are sufficiently encouraging it is hoped to carry on all the year round.

Burwell Senior Council School.—Some 50 to 35 children stay at school at midday, varying with the time of the year, and about 60 per cent. of these partake of the meal. With the help of produce from the school garden, the charge per meal remains at 2½d. All members of the staff take an equal share in serving the meals, while

the preparation and cooking are carried out by a rota of the senior girls under direction from the Cookery Mistress. "The additional accommodation provided by the Committee during the past year has greatly facilitated this side of the school activities."

Isleham C. of E. School.—The provision of free vegetables by certain parents and from the school garden enables the two-course hot meal to be provided for 2d. "The girls arrange the menu, buy and pay for goods, prepare and cook the food, dish up and serve it by themselves. A profit is made."

Sawston Senior School.—"The number of children taking advantage of the School dinner scheme is increasing slowly. Last year it was reported that 126 was the highest number reached; the number of dinners served on one day in February of this year was 129, and in the Autumn Term, when the numbers of the school roll are at the maximum, there were at times 140 dinners prepared. The amount of food provided in each of the two courses reaches a satisfactory amount. Bread is now put on the table each day for those children who want it: up to the present not very many avail themselves of it. Drinking water is also on the table and each child is provided with a tumbler. Now that so many children (about 150) are taking milk during the morning, the demand for cocoa at the mid-day meal has almost died out."

Fordham C.E. School.—The weekly charge is 1/6, thus approximately 3½d. per meal. "Ten separate menus have been devised by the Domestic Subjects Mistress, and two of the senior girls take turns in preparing the meals, while another keeps the accounts." The demand for cocoa has disappeared since the milk scheme came into operation.

Milk Meals.—The facilities developed during the winter now ending are replacing the earlier scheme whereby children of sub-normal nutrition received malt and cod liver oil in school. This is now mainly limited to that minority of schools in which a milk scheme has not been considered practicable.

Circular 1437 issued by the Board of Education on September 5th, 1934, may well prove to be an epoch-making document in the history of the physical well-being of the school child, and thus eventually a valuable contribution to the national health. It conveyed the desire of the Board that wide advantage should be taken of the scheme submitted by the Milk Marketing Board and approved by the Minister of Agriculture whereby $\frac{1}{2}$ pint of milk would be available at school for children at a reduced cost of $\frac{1}{2}d.$, delivered in bottles wherever practicable. This was to be available for the whole school population for payment, and was to be developed by arrangements organised by teachers on a voluntary basis. The source and quality of the supply was to be approved in County areas by the County Medical Officer, and the supply of efficiently pasteurised milk, where available, was urged, in other areas all possible precautions being taken to ensure as far as practicable the safety of the supply.

The foregoing relates to all school children, but, in addition, children of subnormal nutrition could be supplied free by the Education Authority on medical recommendation, the approval of the Board having been obtained to the exercise of powers under Sections 82 to 84 of the Education Act, 1921. These powers, were, in fact, applied for and are now in operation, the free supply of milk replacing largely the supply of malt and cod liver oil.

As regards the general scheme for the whole school population, it may be said that the Education Committee speedily authorised its operation on voluntary lines, and full acknowledgment should here be made of the keenness of the Teachers and the readiness to undertake the detailed work involved. At the time of writing 4173 out of an average attendance of 8232 children in the elementary schools are in receipt of milk for payment, while 84 are supplied free by the Education Committee on medical grounds. In addition milk schemes are in operation in the Secondary Schools.

As it was impracticable to obtain a general supply of efficiently pasteurised milk in the scattered County area, much work has been involved in securing suitable sources of supply. Great assistance has been given by Mr. McMillan, the County Organiser of Agricultural Education, in investigating the actual conditions under which proposed supplies are produced, a considerable number of inspections being necessary for this purpose. On receipt of a favourable report, the necessary sanction has been given in each case by the County Medical Officer, and transmitted by him to the Teacher concerned. The records of the Public Health Department relating to tubercular milk supplies have in all cases been searched before authorisation has been issued, and arrangements have been made with the Chief Constable for sampling the supplies authorised for revision purposes. In addition, the Education Committee have included a sum in the estimates to permit of periodic examination of these supplies for estimation of the bacterial content as evidence of continued cleanly production.

Co-operation.—There can be few English towns where auxiliary health services through voluntary agency have been developed to the same extent and as efficiently as in Cambridge, and the same appreciative observation applies to the wider area of the Administrative County. The County Education Committee have continued to make full use of such facilities, paying an annual subsidy where direct services are rendered. Under this system annual grants are made to the County and District Nursing Associations for school nursing services, to the Cambridgeshire Voluntary Association for Mental Welfare for supervision and report upon mentally defective children not in special schools, to the County Branch of the British Red Cross Society for their excellent work undertaken in the orthopaedic clinics, and to the N.S.P.C.C. for action in cases referred to them where neglect has occurred or special help is called for. Mutual assistance in the provision of surgical appliances is given between the School Medical Department and the Cambridge and District Central Aid Society, and there is constant interchange of information between the Department and Addenbrooke's Hospital, Cambridge; it is a pleasure to acknowledge here the value of the help so readily given.

There is also helpful co-operation with certain national bodies, notably Dr. Barnardo's Homes, while use is made also, for payment, of the Open Air Schools managed by the Invalid Children's Aid Association and the Ogilvie Trust. The help given also by the Rural Community Council in arranging lectures by the Dental Board of the United Kingdom should not be unacknowledged.

In this, his last Annual Report, the retiring School Medical Officer is very desirous of expressing the extreme indebtedness of the School Medical Service to the Teachers, and his great appreciation of the invaluable assistance so very willingly given by them. From the inception of the scheme twenty-six years ago their attitude throughout has been one of recognition of the value of the work with an extreme readiness to share the burden of routine procedures and to bring their personal influence to bear in special circumstances. The constant intercommunication between the Public Health and Education Departments, including the School Attendance Officers, is also so well established as to have become almost a matter of course, but its value is none the less appreciated by the School Medical Service, who are also appreciative of the co-operative attitude of the County Architect's Department.

Blind, Deaf, Defective and Epileptic Children.

A numerical return of all exceptional children known at the end of 1934 to belong to the area is furnished in Table III. appended to this report. Medical reports recommending institutional care were made to the School Attendance Sub-Committee during the year regarding 13 physically defective children suitable for open-air schools, mainly on grounds of malnutrition, two for special schools for the mentally defective, and one for a school for heart cases. One epileptic child was reported, and permanently exempted from school attendance.

As the administrative education area is entirely rural, the whole population living in villages, the special school problem is entirely residential, and careful selection is therefore necessary on financial grounds. The year's record of children maintained in institutions is as follows:—

	<i>Mentally Defective.</i>	<i>Epileptic.</i>	<i>Deaf.</i>	<i>Blind.</i>	<i>Physically Defective.</i>
Remaining Dec. 31st, 1933	..	5	—	6	3
Admitted in 1934	..	1	—	1	—
Discharged in 1934	..	2	—	—	—
Remaining Dec. 31st, 1934	..	4	—	7	3
					2

The children noted in the Physically Defective column were in open-air schools, with the exception of one cripple child (still in institution) and one child in a school for heart cases.

The County Council is a constituent authority of the East Anglian Institution for Blind and Deaf Children at Gorleston-on-Sea,

where 5 places are reserved for children from their area, and children are sent to other similar certified schools when the institution at Gorleston is filled. Places are reserved for illnourished and pre-tuberous children at the open-air schools managed by the Invalid Children's Aid Association and at the Ogilvie School of Recovery at Clacton-on-Sea. The provision made on these lines includes children for whom the Council become responsible as the Public Assistance Authority.

Supervision of children leaving open-air schools is exercised by the School Medical and Nursing Staffs, while those who leave certified and special schools at the age of 16 are referred to the appropriate local voluntary associations for the care of the mentally defective, blind and deaf. The Cambridgeshire Society for the Blind and the Cambridgeshire Voluntary Association for Mental Welfare undertake statutory duties for the County Council.

Mental Deficiency.—Of 26 cases of mental defect brought to the notice of the Education Committee during the year, 16 were for purposes of ascertainment and record, and of these, 2 were exempted from school attendance. In addition, one child was approved for admission to a special residential school and another was notified as about to leave a special school at 16 years; both shortly afterwards left the County area. Eight children were notified as inadmissible in an elementary or special school, and, of these, one was admitted to a Certified Institution under order under the Mental Deficiency Acts, 5 were placed under Statutory Supervision and one under Voluntary Supervision, and the remaining child was admitted to a Public Assistance Institution for nursing care.

Special school accommodation for higher grade mentally defective children is obtained in branches of the Royal Eastern Counties Institution, where 4 children were under instruction at the end of the year. Continuity of protection and control at the leaving age of 16 years is secured by notification to the Committee for the Care of the Mentally Defective. The Cambridgeshire Voluntary Association for Mental Welfare undertake voluntary supervision of higher grade defective children who leave the elementary schools at the age of 14, and they also investigate for the Education Committee the circumstances of possible candidates for special schools.

One child who was notified as about to leave a special school at 16 years, left the county area shortly after discharge.

There is much misconception of the functions of the special school, and too great a tendency to regard it solely from the point of view of providing vocational training, overlooking the fact that the mentally defective child is not only handicapped by its defect in learning a profitable occupation, but has much greater difficulty than the normal child in adapting itself to the ordinary requirements of social conduct, and therefore needs educating in the art of living. It is worth while therefore to include in this report the following concise statement by Sir George Newman of the aims and practices of the special school. “The proposed aim of the special school is to educate the child to be as good and useful a citizen as his limited mental equipment will allow; (a) to train him in social behaviour,

(b) to give him as wide a knowledge as possible of the world around him, (e) to give him some vocational skill so that he may more readily secure and keep a job and thus avoid the demoralising effects of unemployment which his feebler powers enable him less readily to withstand."

The report of the Mental Deficiency Committee of the Board of Education and Board of Control issued in 1929, though far from advocating the abolition of the special school for "educable" mentally defective children, recommended the education of mentally defective children within the elementary system in classes which would include the mentally defective with dull and backward children. As Sir George Newman puts it, "while the status of the speical school is unaltered it is now no longer the only alternative to those elementary schools which are designed mainly for the normal child. Classes are being provided within the elementary school with curricula and methods designed for dull and backward children" "So far, in most areas, these arrangements are of an experimental nature. varying from place to place and even from school to school. Occasionally a scheme effecting all retarded children in the area is found to be in force, but usually the idea is making ground spasmodically, and while one school or district may have a good plan, other schools may be doing nothing." In this County, except at Sawston Senior Sehool, a start has not yet been made with classes for retarded children, provision for which is only practicable in the large schools or in the few villages where there is more than one school. The development of the grouped school system, now happily well-afoot, should solve this problem to a considerable extent as far as children of eleven years and upwards are concerned.

Higher Education.—The Local Education Authority send adolescent pupils to existing institutions elsewhere. During the year they maintained two blind male pupils who left the institutions during this period, and one deaf male pupil who remained under instruction at the end of the year.

Medical Inspection in Secondary and Technical Schools.

All candidates to whom County Minor Scholarships and Free Studentships at the Technical School had been awarded were examined, the numbers being as follows :—

	Boys.	Girls.
Cambridge and County High School for Boys	32	—
Cambridge and County High School for Girls	—	23
Soham Grammar School	10	—
Ely High School	—	7
Perse Schools	6	3
Technical School	14	14
	<hr/>	<hr/>
	62	47

All candidates were considered fit on health grounds to hold their scholarships. The following particulars will be of interest as indicating the defects found to be present, and the extent to which they had been remedied.

Of 9 candidates with defective sight, 4 were already wearing suitable spectacles, 5 had since had glasses provided. (Assistant School Medical Officer 1, Dr. Graham 2, privately 2).

Dental treatment was found to be required by 22 candidates. For 5 of these treatment was completed by the County School Dentist, and 17 through other channels.

Apart from those whose defects had recently been treated, reinspection would be required by 4 pupils on account of defective sight, 3 for nose, throat and ear, 4 for postural defects and 3 for general conditions.

The foregoing statement relates to candidates examined before admission to the Technical and Secondary Schools. During the year fee-paying entrants and a newly added intermediate age group also underwent routine examination, the total number thus inspected being made up as follows :—

			<i>Male.</i>	<i>Female.</i>
County High School for Boys	..	..	142	—
County High School for Girls	..	..	—	116
Soham Grammar School	..	..	51	—
Technical School	..	..	49	31
			242	147

Excluding scholarship entrants, the principal defects detected among the 389 pupils examined were as follows :—

			<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Subnormal Nutrition	..	..	10	3	13
Nose and Throat Defects :					
For observation	..	..	7	3	10
For treatment	..	..	—	—	—
Defective vision :					
For observation	..	..	31	21	52
For treatment	..	..	8	13	21
External eye conditions	..	..	—	1	1
Defective hearing	..	..	2	—	2
Orthopaedic	..	..	—	2	2
Circulatory	..	..	4	1	5
Other conditions	..	..	12	11	23

The condition as to nutrition noted was as follows :—

			<i>Boys.</i>	<i>Girls.</i>	<i>Total.</i>
Normal (or above)	..	..	232	144	376
Subnormal	..	..	10	3	13

The small proportion, 3.3 per cent, of pupils whose state of nutrition was noted to be subnormal may be regarded with satisfaction and repeats the experience of the previous year. Pupils

examined included for the first time those half way through their secondary school career, and these figures looked at broadly, would therefore suggest that the strain of secondary school life has not proved excessive.

Of 31 boys and 21 girls noted for observation on account of defective sight, 30 boys and 18 girls were already wearing spectacles. In addition, a number of those for whom treatment was advised were wearing spectacles, and at this stage might benefit by a change of prescription.

In addition to the foregoing routine examinations, 42 boys and 21 girls were re-examined because of defects previously noted, but beyond some 11 pupils noted for dental treatment and 2 for visual defects there was little occasion to advise the parents formally to secure medical treatment. Such examinations do, however, afford the opportunity of keeping in touch with the progress of chronic defects, such as defects of sight, and of giving verbal advice as occasion arises.

Dental inspection was carried out by the County School Dentist, all entrants being inspected, whether scholarship holders or fee-payers, with an intermediate age group added for the first time. The great majority of pupils obtained dental treatment out of their own resources, but a certain number in necessitous circumstances were treated by the School Dentist.

	<i>Required Treatment.</i>	<i>Received Treatment.</i>
<i>Inspected.</i>		
County High School for Boys	198	66
County High School for Girls	138	42
Soham Grammar School ..	52	13
Cambs. Technical School ..	190	65
	578	186
		129

Those in the " Received Treatment " column include a number in which treatment had not actually been completed at the time of writing but a definite promise had been given by the parents.

Mention may conveniently be made here of the considerable extensions to the buildings of the County High School for Boys which were carried out during the year and which were recently opened by Lord Rutherford. They comprise a large assembly hall, senior chemical laboratory, art room and additional classrooms. The assembly hall is particularly valuable from the health point of view, as it is used also for gymnastics and physical training. These buildings, designed by the County Architect, should prove a valuable addition to the school.

Payments by Parents.

There is no change to record under this heading. The arrangements in force in connection with the medical treatment of children attending public elementary schools continue to be on the lines approved by the Board of Education in 1923. The decision whether children are eligible to receive treatment at Addenbrooke's Hospital

under the Committee's arrangements is governed by a weekly income scale per head of the family. The same applies to children selected for examination for errors of refraction, and for contribution towards the cost of spectacles. For treatment by the School Dentist, an inclusive fee of 6d. per treatment is charged.

At the Secondary Schools similar arrangements hold good for scholarship holders, but, as a rule, the parents of fee-payers provide treatment out of their own resources, exceptional cases being aided by the Committee.

Health Education.

As stated in previous reports, the Board's Handbook of Suggestions on Health Education, reissued in 1933, has been supplied to all the schools and may be regarded as the main stay of the Teachers who have to impart hygienic instruction as part of the curriculum. The importance of the proper teaching of this subject to the child, both for his present benefit and as the foundation of his future sanitary conduct as an adult citizen, can hardly be over-estimated, nor can the value of clean, bright, airy and otherwise well sanitised school buildings as a practical object lesson. Mr. Urwin's note on the plans of future Village Colleges at which, eventually, all school children aged eleven and upwards will arrive is of special interest (see page 4).

In the section on this subject in his Annual Report to the Board of Education for 1933, Sir George Newman emphasises the value of such instruction in the creation and establishment of habits of health. "What the child hears, or even sees, is liable to be soon forgotten, but what it does as a habit is retained. Again, it will be recognised by almost everybody that the sanitary condition of the school (its equipment, lighting, ventilation and cleanliness) is a daily example or warning to the child. The direct and indirect teaching of hygiene by the school teacher, the school doctor, or any visiting expert can be made of first-rate importance, particularly if it takes place both regularly as a lesson in the time table and incidentally as particular occasion arises either in some topical event or in association with other subjects in the curriculum."

The imparting of hygienic information commences with the mothers, who are advised by the Health Visitors under the Maternity and Child Welfare Scheme regarding the healthy upbringing of young children below school age, and this is carried on for the school child through the same Nurses in their capacity of School Nurse, where defects found during medical inspection in school require following up in the homes. Leaflets regarding personal cleanliness, contagious skin disease and the care of the child sufferer from measles and whooping cough are distributed as special occasion arises. Addresses on various health matters have also been given to mothers from time to time by members of the professional staff of the Public Health Department and Tuberculosis Dispensary, and instruction on mothercraft has been given during the year to the girls attending the Sawston Senior Council School by the Assistant Superintendent of the County Nursing Association.

The addresses on dental hygiene given in the schools by a lecturer from the Dental Board of the United Kingdom have been referred to elsewhere ; they are reported to have been highly appreciated.

Miscellaneous.

Special reports have been furnished regarding the fitness of teachers for duty, and medical certificates furnished by some 38 teachers on appointment have been advised upon, with medical examination where necessary. A large number of reports have also been furnished on the fitness of children for school attendance.

Full acknowledgment should be made of the services of Dr. Gellatly, the Assistant School Medical Officer, who undertakes the great bulk of the work of school medical inspection together with special duties in connection with exceptional children and those suffering from defective vision, and who has assisted in the compilation of the annual statistical tables appended to this report.

Acknowledgments are also due to the School Dentist, Mr. Evered, for his report and statistics relating to dental inspection and treatment, and to Dr. Paton Philip, the Tuberculosis Officer, for much assistance in connection with diagnosis and institutional care.

FRANK ROBINSON,
School Medical Officer.

Shire Hall,
Cambridge.
31st March, 1935.

Dental Inspection and Treatment.

Twenty-first Annual Report by Mr. J. C. G. Evered, L.D.S. (Edin)., County School Dentist.

During 1934, children aged 5-14 were dealt with in the larger schools, but in those schools where the numbers on the register are below 60, the whole were dealt with, children under 5 years thus being included. The year's work is set out in detail in the statistical tables appended to the School Medical Officer's report, but certain information may usefully be stated here in tabular form.

1. Schools dealt with :

A.	Schools inspected and treated	..	..	120
B.	Schools inspected only	..	..	14
C.	Total schools visited (A+B)	..	..	134

2. Children dealt with :

A.	In schools inspected and treated	..	..	7755
	Required no treatment	..	..	3865
	Required treatment	..	..	3890
	Received treatment	..	..	2467
	Refused treatment	..	..	1423
	Temporary teeth extracted	..	..	4120
	Permanent teeth extracted	..	..	420
	Fillings	..	..	1872
B.	In schools inspected only	..	..	879
	Required no treatment	..	..	395
	Required treatment	..	..	484
C.	In total schools visited (A+B)	..	..	8634
	Required no treatment	..	..	4260
	Required treatment	..	..	4374
D.	Special cases	..	..	169
	Temporary teeth extracted	..	..	465
	Permanent teeth extracted	..	..	21
	Fillings	..	..	72

Of 8,634 children who underwent routine dental inspection 4,260 or 49.3 per cent. required no treatment, while 4,374 or 50.7 per cent. did require it, being 0.3 per cent. higher than last year.

In schools both inspected and treated during the year, of those 3,890 children requiring treatment, 64.1 per cent. received it, the parents refusing treatment for the remaining 35.9 per cent., a decrease of 0.2 per cent. on last year's refusals.

In 19 schools there were no refusals of treatment, a decrease of 3 on last year, while in 23 schools there were fewer than 5 refusals, a decrease of 1 on last year.

The numbers of temporary and permanent teeth extracted were 4,120 and 420 respectively, and 1,872 fillings were done. Of the children inspected, 4,792 or 61.7 per cent. were found to have clean mouths, while pus was noted to be present in the mouths of 2,963 or 38.3 per cent.

Children to the number of 169 were treated as special cases either being brought specially to my notice or coming forward voluntarily for treatment. For these children 465 temporary and 21 permanent teeth were extracted and 72 were filled.

Including both routine and special cases, the total number who received treatment during the year was 2,666. The numbers of temporary and permanent teeth extracted were respectively 4,585 and 441, while 1,944 fillings were done, and minor operations, sealings, etc. amounted to 275.

I must again record my thanks to the teaching staff for the very cordial and valuable help they continue to give me in my work, and I have noticed a marked reduction in the number of refusals in those schools where the teachers make a point of talking to the children about the importance of good teeth. Also to the nursing staff I tender my thanks for the whole hearted help given to me in helping in the schools, and also in interviewing the parents of children for whom treatment has been refused.

Secondary Schools.—The following tables show the results of inspection and treatment carried out at the Secondary Schools.

Total number inspected	..	..	..	..	643
Required no treatment	..	..	..	..	507
Required treatment	..	..	..	..	136
Received treatment	..	..	..	..	18
Temporary teeth extracted	..	..	..	..	4
Permanent teeth extracted	..	..	..	..	4
Fillings	..	..	..	..	27

The remaining children requiring treatment received treatment from their own dentists.

J. C. G. EVERED.

TABLE II.

A.—Return of defects found in the course of Medical Inspection in 1934.

Defect or Disease.			Routine Inspections.	Special Inspections.		
	(1)		(2)	(3)	(4)	(5)
Skin.	Malnutrition ..	..	26	118	5	5
	Ringworm :					
	Scalp ..	..	—	1	—	1
	Body ..	..	—	2	—	—
	Scabies ..	..	—	2	1	—
	Impetigo ..	..	4	—	6	6
	Other Diseases (Non-Tubercular) ..	..	3	25	2	7
Eye.	Blepharitis ..	..	1	7	—	—
	Conjunctivitis ..	..	15	19	6	10
	Keratitis ..	..	—	1	—	—
	Corneal Opacities ..	..	—	—	—	—
	Defective Vision (excluding squint)		80	145	26	34
	Squint ..	..	4	20	1	2
	Other conditions ..	..	2	11	3	2
Ear.	Defective Hearing ..	..	2	2	3	1
	Otitis Media ..	..	—	1	—	—
	Other Ear Diseases ..	..	—	14	3	9
Nose and Throat.	Chronic Tonsillitis only ..	..	3	107	5	18
	Adenoids only ..	..	—	—	—	1
	Chronic Tonsillitis & Adenoids ..	..	1	2	2	—
	Other conditions ..	..	46	47	10	9
Enlarged Cervical Glands (Non-Tuberculous) ..			2	53	2	6
Defective Speech ..			1	22	1	5

Defect or Disease.

		Routine Inspections.		Special Inspections.	
		(1)	(2)	(3)	(4)
			Number referred for Treatment.	Number requiring to be kept under observation, but not referred for Treatment.	Number referred for Treatment.
Heart	Heart Disease :				
and	Organic	..	..	—	—
Circula-	Functional	..	..	6	—
tion.	Anæmia	..	..	2	—
Lungs.	Bronchitis	..	..	5	—
	Other Non-Tuberculous Diseases			4	—
					3
					2
Tubercu-	Pulmonary :				
losis	Definite	..	..	—	—
	Suspected	..	..	—	—
	Non-Pulmonary :				
	Glands	..	..	1	—
	Bones and Joints	..	..	1	—
	Skin	..	..	—	—
	Other Forms	..	..	—	1
					1
Nervous	Epilepsy	..	..	—	1
System.	Chorea	..	..	—	1
	Other Conditions	..	..	6	—
					3
Defor-	Rickets	..	..	1	—
mities.	Spinal Curvature	..	..	2	—
	Other Forms	..	..	6	1
					2
Other	Defects and Diseases	..	..	23	431
				17	67

TABLE II.

B.—Number of *Individual Children* found at *Routine Medical Inspection* to Require Treatment (excluding Uncleanliness and Dental Diseases.)

Group. (1)	Number of Children.		Percentage of Children found to re- quire treat- ment. (4)
	Inspected. (2)	Found to re- quire treat- ment. (3)	
CODE GROUPS :			
Entrants ..	866	80	9.2
Second Age Groups ..	995	79	7.9
Third Age Group ..	955	44	4.6
Total (Prescribed Groups)	2816	203	7.2
Other Routine Inspections ..	149	9	6.0

TABLE I. Return of Medical Inspection.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections.

Entrants ..	..	..	..	..	..	866
Intermediates	995
Leavers	955
Total	2816

Number of Other Routine Inspections	149
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B.—OTHER INSPECTIONS.

Number of Special Inspections	360
Number of Re-inspections	5062
Total ..	..	..	..	5452

TABLE III.—Return of all Exceptional Children in the Area.

Children suffering from multiple defects	Nil.
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Blind Children.

At Certified Schools for the Blind	1
At Public Elementary Schools	—
At other Institutions	..	..	..	..	—
At no School or Institution	..	..	..	..	1
Total	..	..	..	..	2

Partially Blind Children.

At Certified Schools for the Blind	..	..	..	..	2
At Certified Schools for the Partially Blind	..	..	..	..	—
At Public Elementary Schools	..	..	..	..	4
At other Institutions	..	..	..	..	—
At no School or Institution	..	..	..	..	2
Total	..	..	..	..	8

Deaf Children.

At Certified Schools for the Deaf	..	..	..	..	4
At Public Elementary Schools	..	..	..	..	—
At other Institutions	..	..	..	..	—
At no School or Institution	..	..	..	..	—
Total	..	..	..	..	4

Partially Deaf Children.

At Certified Schools for the Deaf	..	..	..	..	3
At Certified Schools for the Partially Deaf	..	..	..	..	—
At Public Elementary Schools	..	..	..	..	—
At other Institutions	..	..	..	..	—
At no School or Institution	..	..	..	..	—
Total	..	..	..	..	3

Mentally Defective Children (feeble-minded).

At Certified Schools for Mentally Defective Children	..	..	..	..	4
At Public Elementary Schools	..	..	..	..	197
At other Institutions	..	..	..	..	—
At no School or Institution	..	..	..	..	7
Total	..	..	..	..	208

Epileptic Children (severe).

At Certified Special Schools	..	..	..	..	—
At Public Elementary Schools	..	..	..	..	—
At other Institutions	..	..	..	..	—
At no School or Institution	..	..	..	..	5
Total	..	..	..	..	5

Physically Defective Children.

(a) Tuberculous Children.

(i) Children suffering from pulmonary tuberculosis.					
At Certified Special Schools	..	..	..	..	-
At Public Elementary Schools	..	..	..	..	-
At other Institutions ..	..	..	..	..	-
At no School or Institution ..	..	..	..	..	3
Total					3

(ii) Children suffering from non-pulmonary tuberculosis.

At Certified Special Schools	..	..	..	..	4
At Public Elementary Schools	..	..	..	..	-
At other Institutions ..	..	..	..	..	-
At no School or Institution ..	..	..	..	..	-
Total					4

(b) Delicate Children.

At Certified Special Schools	..	..	..	..	1
At Public Elementary Schools	..	..	..	..	102
At other Institutions ..	..	..	..	..	-
At no School or Institution ..	..	..	..	..	6
Total					109

(c) Crippled Children.

At Certified Special Schools	..	..	..	..	1
At Public Elementary Schools	..	..	..	..	16
At other Institutions ..	..	..	..	..	-
At no School or Institution ..	..	..	..	..	3
Total					20

(d) Children with heart disease.

At Certified Special Schools	..	..	..	..	-
At Public Elementary Schools	..	..	..	..	5
At other Institutions ..	..	..	..	..	-
At no School or Institution ..	..	..	..	..	1
Total					6

TABLE IV.—Return of Defects Treated during the Year ended
31st December, 1934.

TREATMENT TABLE.

GROUP I.—MINOR AILMENTS (EXCLUDING UNCLEANLINESS).

(1)	Number of Defects treated, or under treatment during the year.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Skin—			
Ringworm—Scalp	..	—	—
Ringworm—Body	..	—	25 25
Scabies	..	—	5 5
Impetigo	..	—	130 130
Other Skin Disease	..	—	15 15
Minor Eye Defects—			
External and other, but excluding cases falling in Group II.)	.. ..	3 35	38
Minor Ear Defects	.. ..	9 5	14
Miscellaneous— (e.g., Minor Injuries, bruises, sores, chilblains, etc.)	..	— 3	3
Total	12	218	230

GROUP II.—DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS—GROUP I.).

Defect or Disease. (1)	Number of Defects Dealt with.		
	Under the Authority's Scheme. (2)	Otherwise. (3)	Total. (4)
Errors of Refraction (including Squint)	213	45	258
Other Defect or Disease of the eyes (excluding those recorded in Group I.) ..	—	—	—
Total ..	213	45	258

Total number of children for whom spectacles were prescribed :—

- | | |
|--|-----|
| (a) Under the Authority's Scheme | 204 |
| (b) Otherwise | 45 |

Total number of children who obtained or received spectacles :—

- | | |
|--|-----|
| (a) Under the Authority's Scheme | 204 |
| (b) Otherwise | 45 |

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Defects.					
Received Operative Treatment.			Total Number Treated.		
Under Authority's Scheme in Clinic or Hospital. (1)	By Private Practitioner or Hospital apart from the Authority's Scheme (2)	Total. (3)	Received other Forms of Treatment. (4)	(5)	
(i) (ii) (iii) (iv)	(i) (ii) (iii) (iv)	(i) (ii) (iii) (iv)	(i) (ii) (iii) (iv)		
4	—	4 4	13	25	55
					80

- (i) Tonsils only. (ii) Adenoids only. (iii) Tonsils and Adenoids.
(iv) Other defects of the nose and throat.

Group IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

Number of children treated under the Authority's Scheme.

Residential treatment with education	..	..	..	1
Residential treatment without education	..	..	..	—
Non-residential treatment at an orthopaedic clinic	..	..	..	54

Number of children treated otherwise.

Residential treatment with education	..	..	..	—
Residential treatment without education	..	..	..	—
Non-residential treatment at an orthopaedic clinic	..	..	..	—
Total number treated	..	..	..	55

Group V.—DENTAL DEFECTS.

(1) Number of Children who were :—

(a) Inspected by the Dentist.

Routine Age Groups ..	5 ..	718
	6 ..	745
	7 ..	873
	8 ..	797
	9 ..	872
	10 ..	866
	11 ..	897
	12 ..	952
	13 ..	916
	14 ..	119
		— 7755
Specials		169
Grand Total		7924
(b) Found to require treatment		3890
(c) Actually treated		2467
(2) Half-days devoted to (Inspection 148) (Treatment 242) Total ..		390
(3) Attendances made by Children for treatment ..		2467
(4) Fillings (Permanent Teeth 1649) (Temporary Teeth 223) Total ..		1872
(5) Extractions (Permanent Teeth 420) (Temporary Teeth 4120) Total ..		4540
(6) Administrations of general anaesthetics for extractions		Nil.
(7) Other operations (Permanent Teeth 21) (Temporary Teeth 465) Total		486

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

Total children examined in schools by School Nurses ..	590
Total found unclean	60
Cleansed under arrangements made by Authority	—
Legal proceedings	—